

**NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM STORM WATER MANAGEMENT PROGRAM
PHASE II, REGULATED SMALL MUNICIPAL SEPARATE STORM
SEWER SYSTEM (MS4)**

PERMIT APPLICATION (NOTICE OF INTENT)



**GOBIERNO MUNICIPAL DE UTUADO
P.O. BOX 190
UTUADO, P.R. 00641**

**U.S. ENVIROMENTAL PROTECTION AGENCY- REGION II
CARIBBEAN ENVIROMENTAL PROTECTION DIVISION**

**Centro Europa Building, Suite 417
1492 Ponce de Leon Avenue
Arecibo, Puerto Rico 00907- 4127**

1.0**BACKGROUND**

In 1972, Congress amended the Federal Pollution Control Act (Commonly referred to as the Clean Water Act (CWA) to prohibit the discharge of any pollutant to waters of the United States from point sources unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) PERMIT. The NPDES program is a program designed to track point sources and require the implementation of the controls necessary to minimize the discharge of pollutants. Initial efforts to improve water quality under the NPDES program was primarily focused on reducing pollutants in industrial process wastewater and municipal sewage. These discharge sources were easily identified as responsible for poor, often drastically degraded, water quality conditions.

As pollution control measures for industrial process wastewater and municipal sewage were implemented and refined, it became increasingly evident that more diffuse sources of were pollution were also significant causes of water quality impairment. Specially, storm water runoff drainage from large surface areas, such as agricultural and urban land, was found to

be a major cause of water quality impairment including the nonattainment of designated beneficial uses.

In 1987, the CWA amended to require implementation, in two phases, of a comprehensive national program for addressing storm water discharges. The first phase of the program, commonly referred to as “Phase I”, was promulgated on November 16, 1990 (55 FR 47990). Phase I requires NPDES permits for storm water discharge from a large number of priority sources including municipal separate storm sewers systems (“MS4s”) generally serving populations of 100,000 or more and several categories of industrial activity, including construction sites that disturb five or more acres of land.

The second phase of the storm water program (i.e., Phase II), promulgated on December 8, 1999 (64 FR 68722), expands the existing NPDES storm water program Phase1. Phase 2 requires additional operators of MS4s in urbanized areas (small MS4s), as delineated by the Bureau of the Census, and construction sites that disturb one to five acres to implement programs and practices to control polluted storm water runoff.

EPA published the “Phase II” storm water regulations on December 9, 1999(64 FR 68721). A “regulated small MS4” is an MS4 located within an urbanized area defined by the latest Census, or an MS4 that has been specifically designated by EPA Region 2. The Phase II applicability determination is based on a review o the U.S. Census Bureau maps of the urbanized areas in the Commonwealth of Puerto Rico and the assumption that the municipality separate storm sewer system discharges to waters of the United States.

Under 40 CFR 122.33© (1), regulated small MS4s were required to submit an individual application for permit coverage to EPA Region 2, describing the storm water management plan for storm water discharges from its MS4. However, EPA Region 2 issued a general NPDES permit for regulated small MS4 in November 6, 3006.

1.1 PERMITEE GENERAL INFORMATION

The Utuado MS4 is currently owned and operated by the municipality under the direction of its mayor, Hon. Alan J. Gonzalez Cancel. The Department of Transportation and Public Works (DTPW) will be the office responsible to implement and uphold the proposed storm water program. Mr. Angel Lile Medina, Director of DTPW, will be the person responsible for assuring the program maintains its proposed schedule.

The Municipality of Utuado is located central/ western mountainous region of the island known as *La Cordillera Central* at Latitude 18° 15'56''N and Longitude 66° 42' 02''W. it has a territorial area extension of 299 square miles, one of the biggest municipalities of Puerto Rico. It is located north of Adjuntas and Ponce; south of Hatillo and Arecibo; east of Lares; and west of Ciales and Jayuya Surrounded by mountains that reaches over 900 meters of altitude and rivers that flows through the urban and rural areas of Utuado. Cerro Morales is a mountain summit in Utuado County in the state of Puerto

Rico. Cerro Morales climbs to 3,127 feet (953.11 meters) above sea level. It's in the 50 highest peaks of Puerto Rico.

Many rivers cross the town and this particular one, La Ciudad Del Viví" meaning "The City of the Viví"; is the river that runs through Utuado: one part of it comes from Adjuntas and the other from Jayuya. These two rivers then meet near the Fernando L. Ribas Dominicci Avenue and continue the journey to Lago Dos Bocas, it is one of the most important rivers that give out water to thousands of homes and industries in and out of Utuado. The water area through out the municipality of Utuado is 1.55 square miles.

Utuado according to census 2000, counts with 35,807 habitants and with a housing unit of 12,471. Distributed in twenty-two wards and these are: Angeles, Arena, Caguana, Caniaco, Caonillas Abajo, Caonillas Arriba, Consejo, Don Alonso, Goaonico, Las Palmas, Mameyes Abajo, Paso Palmas, Pueblo, Río Abajo, Roncador, Sabana Grande, Salto Alto, Salto Arriba, Santa Isabel, Santa Rosa, Viví Abajo and Viví Arriba.



Censo 2000: Población por Barrios - Utuado	Habitantes
Ángeles	3,457
Arenas	2,295
Caguana	4,247
Caníaco	155
Caonillas Abajo	1,234
Caonillas Arriba	395
Consejo	538
Don Alonso	897
Guaonico	654
Las Palmas	1,235
Limón	223
Mameyes Abajo	1,207
Paso Palma	556
Río Abajo	325
Roncador	579
Sabana Grande	985
Salto Abajo	5,724
Salto Arriba	442
Santa Isabel	682
Santa Rosa	0
Tetuán	756
Utuado Pueblo	5,363
Viví Abajo	2,817
Viví Arriba	570
Total	

A map detailing the urban area of the town is provided on Figure 1.

The annual precipitation is approximately 70 inches.

2.1 ACTIVITIES SUBJECT TO NPDES APPLICABILITY

The Municipality of Utuado operates a municipal separate storm sewer system located in the urban area of the municipality.

The town of Utuado is located central/ western mountainous region of the island known as *La Cordillera Central* at Latitude 18° 15'56''N and Longitude 66° 42' 02''W. it has a territorial area extension of 299 square miles. Only the urban area of 5.78 square miles will be for purpose of use MS4 management plan.

2.2 NAME, MAILING ADDRESS, AND LOCATION OF FACILITY FOR WHICH THE APPLICATION

Hon. Alan J. Gonzalez Cancel

Mayor

Municipality of Utuado

Apartado 190

Utuado, Puerto Rico 00641

Email: alanjesus@coqui.net or progfedwsr@coqui.net

2.3 STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE

The SIC Code established by the Federal Office of Management and Budget for public administration for local government activities is **9199**.

2.4 OPERATOR NAME, ADDRESS, TELEPHONE NUMBER

Mr. Angel Lile Medina

Director

Department of transportation and Public Works

Apt. 190

Utuaado, Puerto Rico 00641

Tel. (787) 894-0680

**2.5 PERMITS OR CONSTRUCTION APPROVALS
RECEIVED OR APPLIED UNDER THE FOLLOWING
PROGRAMS:**

Resource Conservation and Recovery Act

NONE

Underground Injection Control under the Safe Drinking Water Act

NONE

NPDES Programs under the Clean Water Act

NONE

Prevention of Significant Deterioration program under the Clean Air Act

NONE

No attainment program under the Clean Air Act

NONE

National Emission Standards for Hazardous Air Pollutants preconstruction approval under the Clean Air Act

NONE

Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act

NONE

Dredge or fill permits under section 404 of the Clean Water Act

NONE

Other relevant environmental permits, including state permits

RECICLE PERMIT – RPRM-109 EXPIRE MAY 16, 2009

2.6 STORM WATER SEWER MAP

Included are topographic, extension area maps of the urban area of the municipality. The Municipality of Utuado at this time lacks of information and resources needed to develop a detailed storm sewer map for the municipal operated MS4.

2.7 NATURE OF THE BUSINESS

The Municipality of Utuado Public Works Department operates the municipal storm sewer systems. The Department cleans the sewer systems by removing the sediments, debris and rubbish from its channel. This work is done verifying that the water in the systems can flow freely. When the personnel of the Public Works Department find that there are obstacles on the channels they proceed to remove those obstacles from the system course. During the hurricane season this work is done as often as possible with coordination with the Emergency Management Office and his personnel and

also with the Municipal Police for support. The Public Works Department has adequate heavy equipment as diggers, loaders and trucks to do the job. This work is done throughout the year.

2.8 ESTIMATED SQUARE MILEAGE SERVED BY THE MS4

The Utuado urban area has a population of 9,887 in a total area of 1.63 square miles population density per square mile of land area is 1.67.

The municipality has a territorial extension of 299 miles of which 5.78 square miles are classified as urban area (for purposes of our MS4 management plan, only the delineated urban area is considered the service area of the municipality storm sewer systems).

2.9/.10 BEST MANAGEMENT PRACTICES

2.10.1 Minimum Control Measure 1 – Public Education and Outreach

The Municipality of Utuado will educate their community on the pollution potential of common activities, and increase awareness of the direct links

between land activities, rainfall-runoff, storm drains, and their local water resources. Most importantly our goal is to give the public clear guidance on steps and specific actions that they can take to reduce their stormwater pollution-potential. This are: littering, disposing of trash and recyclables, disposing of pet-waste, applying lawn-chemicals, washing cars, changing motor-oil on impervious driveways, household behaviors like disposing leftover paint and household chemicals.

TARGET AUDIANCE: To implement other required minimum measures

of our program, we will specifically need to reach audiences such as:

- a. Builders, contractors, and developers working on construction sites;
- b. Municipal workers who are responsible for landscaping, street-sweeping and other activities
- c. landscaping companies, and landowners whose lawn and landscape practices can negatively impact storm water quality.

These audiences need more technical and substantive messages, and the municipality will deliver messages to them on-site or at-work, as well as training in staff meetings, morning meetings.

GOALS:

Increase in public awareness of the harmful effect of the stormwater runoff and its potential to affect the water quality of the Municipality of Utuado. Implement the SWMP. These practices will be established in a period of six to twelve months after the approval of this practice.

1. Using the Media

- ☐ Newspapers
- ☐ Radio
- ☐ Televisión
- ☐ Internet Message

2. School Education Campaign- Building a strong relationship with the school district is the most important step in getting stormwater education into the schools. One of the first questions to ask is what if any stormwater education programs have the schools implemented or would like to see implemented if they had the resources to do so.

3. Educational Displays, Pamphlets, Booklets

☐ Pamphlets and Booklets

☐ Signs and Billboards

☐ Flyers

4. Landscaping and Lawn Care Campaign

5. Pest Control Campaign

6. Pet Waste Management Campaign

7. Residential Car Washing Campaign

8. Trash and Debris Management Campaign

9. Water Conservation Practices for Homeowners Campaign

10. Automobile Maintenance Campaign

2.10.2 Minimum Control Measure 2 – Public Involvement and Participation

TARGET AUDIENCE:

In the Municipality of Utuado an MS4 will offer opportunities to the public to participate in storm water program development and implementation, through positions on a local storm water management panel. We will facilitate opportunities for direct action, educational, and volunteer programs

such as riparian planting days, volunteer monitoring programs, storm drain marking, or stream-clean up programs.

GOALS:

Increase the public participation to reduce the effect of harmful way to stormwater run-off and extend the quality of the water. This practice will be held in a period of six to twelve months from the approval of this practice.

- 1. Adopt-A-Stream Programs**
- 2. Reforestation Programs**
- 3. Storm Drain Marking**
- 4. Stream Cleanup and Monitoring**
- 5. Volunteer Monitoring**
- 6. Wetland Plantings**

2.10.3 Minimum Control Measure 3 – Illicit Discharge Detection and Elimination

TARGET AUDIENCE: All citizens that direct or indirect importance in the industrial and commerce area.

GOALS:

Developing, implementing, and enforcing a program that will reduce and eliminate illicit discharge in the storm sewer system. This practice will be held in a period of two years from the time that it will be approved.

1. A storm sewer system map

2. An ordinance prohibiting illicit discharges

To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions;

3. A plan to detect and address these illicit discharges

4. An education program on the hazards associated with illicit discharges.

2.10.4 Minimum Control Measure 4 – Construction Site Storm Water Runoff Control

TARGET AUDIENCE:

Pollutants of construction activity that disturb stormwater flow in projects that affect more than 1 acre.

GOALS:

Developing, implementing, and enforcing a program that will reduce and eliminate the impact of stormwater runoff construction activity that result in land disturbance greater than or equal to 1 acre in to the storm sewer system. This BMP`s will be established in a period of two years from the existence of the practice.

- 1. An ordinance**
- 2. Requirements to implement erosion and sediment control BMP`s**
- 3. Requirements to control other waste at the construction site**
- 4. Procedures for reviewing construction site plans**
- 5. Procedures to receive and consider information submitted by the public**
- 6. Procedures for inspections and enforcement of storm water requirements at construction sites.**

2.10.5 Minimum Control Measure 5 – Post Construction Storm Water Management in Development and Re-development

TARGET AUDIENCE:

Contractors, construction site operator, inspectors and enforcement personnel.

GOALS:

Developing, implementing, and enforcing a program that will reduce and eliminate the impact of stormwater from new development and redevelopment projects that disturb greater or equal than one acre including projects less than 1 acre and are part of a larger development plan, that discharge into the stormwater system throughout the community. This BMP's will be established in a period of two years from the existence of the practice.

- 1. An ordinance to limit surface runoff volumes and reduce water runoff pollution loadings**
- 2. Inspection and Maintenance**

2.10.6 Minimum Control Measure 6 – Pollution Prevention (Good Housekeeping for Municipal Operation)

TARGET AUDIENCE:

Municipal employees and enforcement personnel of the Municipality of Utuado and with the Phase II MS4s will require training staff on ways to protect storm water, particularly when maintaining MS4 infrastructure and performing daily municipal activities, such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. This primarily includes:

GOALS:

Developing, implementing, and enforcing an operation and maintenance program that will reduce and eliminate the established procedures for properly disposing of pollutants removed from the MS4, and Identifying ways to incorporate water quality controls into new and existing flood management projects impact of storm water pollution from open space maintenance, vehicle and building maintenance, land disturbance, storm sewer system maintenance

during the permit term throughout the community. This BMP's will be implemented in a period time in six to eight months from the approval of this practice.

- 1. Developing inspection and maintenance procedures and schedules for storm water BMPs,**
- 2. Implementing BMPs to treat pollutants from transportation infrastructure, maintenance areas, storage yards, sand storage areas, and waste transfer stations,**
- 3. Establishing procedures for properly disposing of pollutants removed from the MS4**
- 4. Identifying ways to incorporate water quality controls into new and existing flood management projects.**
- 5. Municipal employee training and education**
- 6. Municipal vehicle equipment maintenance**
- 7. Municipal vehicle equipment washing**
- 8. Parking lot and street cleaning**
- 9. Used oil Recycling**
- 10. Septic System Control**
- 11. Spill Respond and Prevention Program**

**2.11 PERSON RESPONSIBLE FOR IMPLEMENTING OR
COORDINATING THE APPLICANT'S STORM WATER
MANAGEMENT PROGRAM (SWMP)**

Mr. Angel Lile Medina

Director

Department of transportation and Public Works

Apt. 190

Utuaado, Puerto Rico 00641

Tel. (787) 894-0680

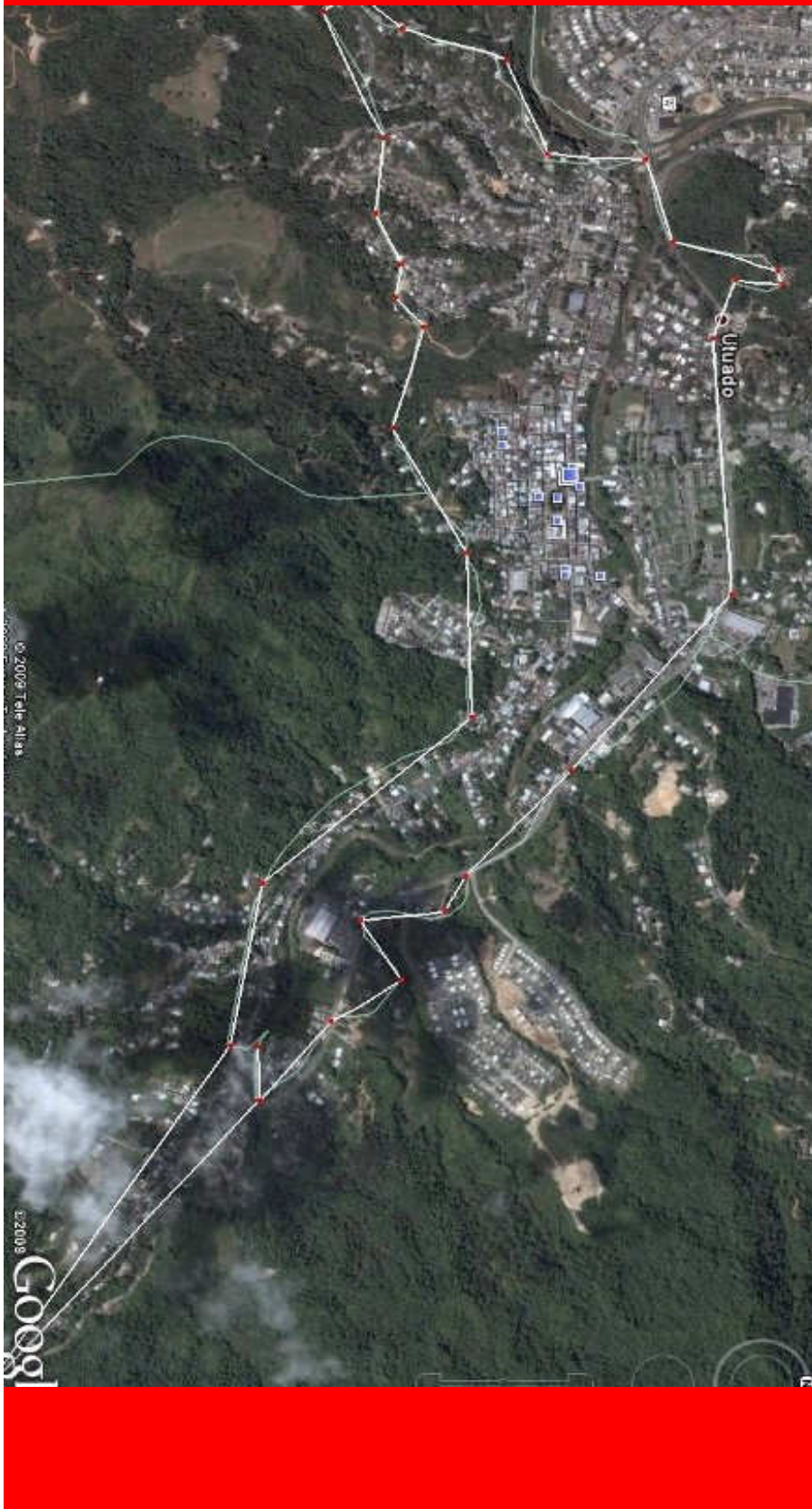


FIGURE I

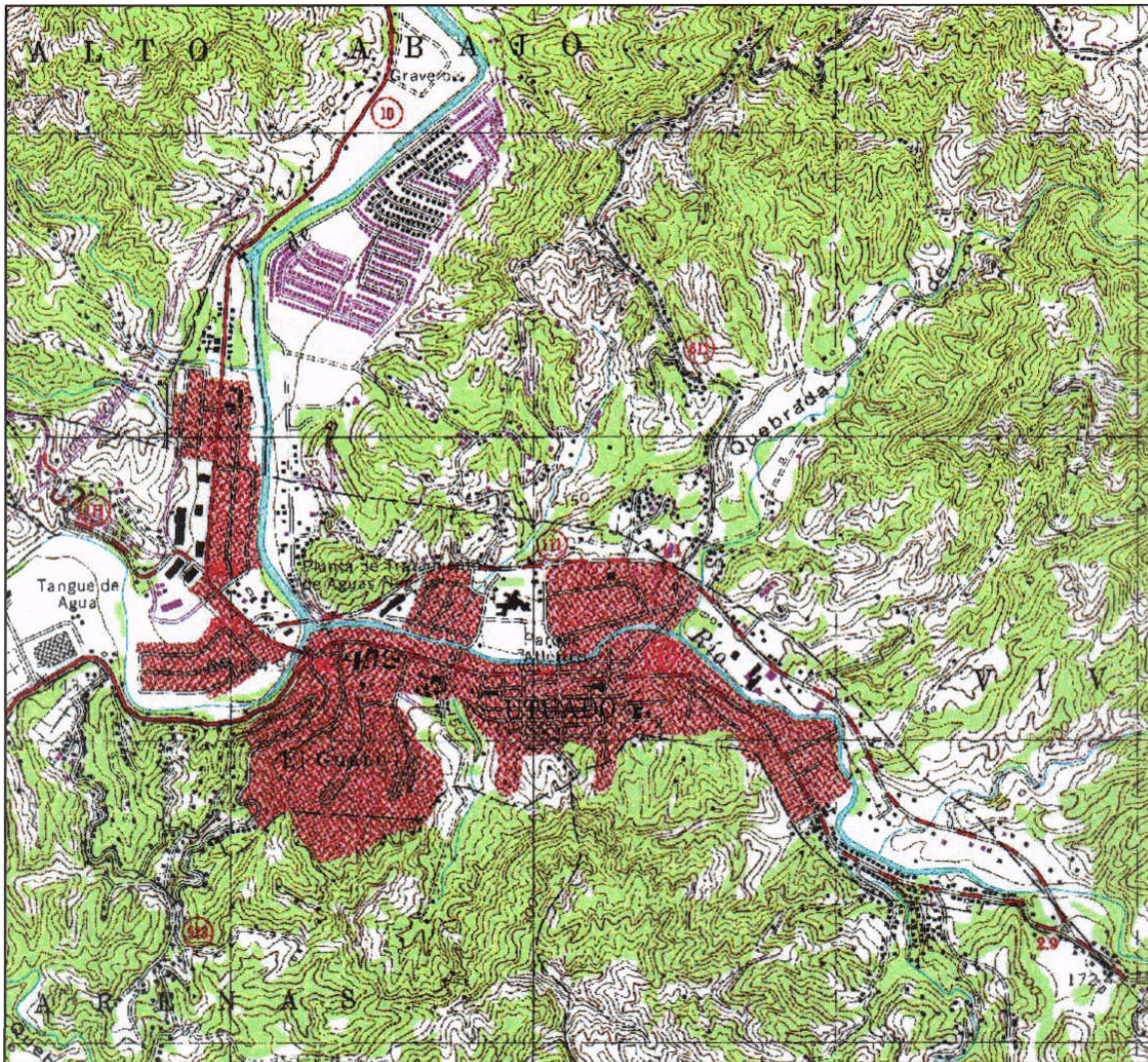
AREA URBANA
DE UTUADO

Municipality Facility Activity	POTENCIAL POLLUTANTS								
	Sediment	Nutrients	Trash	Metals	Bacteria	Oil &	Organics	Pesticides	Oxygen demand
Building and Grounds Maintenance and Repair	X	X	X	X	X	X	X	X	X
Parking/ Store Area Disposal	X	X	X	X	X	X	X		X
Waste Harding and Disposal	X	X	X	X	X	X	X	X	X
Vehicle and Equipment Fueling			X	X		X	X		
Vehicle and Equipment Washing and Steam Clearing	X	X	X	X		X	X		
Vehicle and Equipment Maintenance and Repair				X		X	X		
Outdoor Loading and Unloading of Materials	X	X	X	X		X	X	X	X
Outdoor Container Storage of Liquids		X		X		X	X	X	X
Outdoor Storage of Raw Materials	X	X	X			X	X	X	X
POTENCIAL POLLUTION LIKELY ASSOCIATED WITH SPECIFIC MUNICIPAL FACILITIES									
Outdoor Process Equipment	X		X	X		X	X		
Over water Activities			X	X	X	X	X	X	X
Landscape Maintenance	X	X	X		X			X	X

POTENTIAL POLLUTANTS LIKELY ASSOCIATED WITH MUNICIPAL ACTIVITIES

Municipality Program	Activities	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen demand
Roads, Streets, and Highways Operation and Maintenance	Sweeping and Clearing	X		X	X		X			X
	Street Repair, Maintenance, and Striping/ Painting	X		X	X		X	X		
	Bride and Structure Maintenance	X		X	X		X	X		
Plaza, Sidewalk, and Parking Lot Maintenance and Clearing	Surface Clearing	X	X			X	X			X
	Graffiti Clearing	X	X		X			X		
	Sidewalk Repair	X		X						
	Controlling Litter	X		X		X	X			X
Fountains, Pools, Lakes, and Lagoons Maintenance	Fountain and Pool Training		X					X		
	Lake and Lagoon Maintenance	X	X	X		X			X	X
Landscape Maintenance	Mowing/Trimming/Planning	X	X	X		X			X	X
	Fertilizer & Pesticide Management	X	X						X	
	Managing Landscape Wastes			X					X	X
	Erosion Control	X	X							
Drainage System Operation and Maintenance	Inspection and Clearing of Stormwater Conveyance Structures	X	X	X		X		X		X
	Controlling illicit Connections and Discharges	X	X	X	X	X	X	X	X	X
	Controlling Illegal Dumping	X		X	X		X			X
	Maintenance of inlet and Outlet Structures		X	X	X	X	X	X		X
Waste Handling and Disposal	Solid Waste Collection	X		X	X		X			X
	Wasted Reduction and Recycling		X	X	X	X	X	X		X
	Household Hazardous Waste Collection			X	X					X
	Controlling Litter			X	X		X	X	X	
	Controlling Illegal Dumping			X	X	X		X		X
Waste and sewer Utility Operation and Maintenance	Water Line Maintenance	X		X		X	X		X	X
	Sanitary Sewer Maintenance	X			X	X				
	Spill/Leak/Overflow Control, Response, and Containment	X			X	X				X

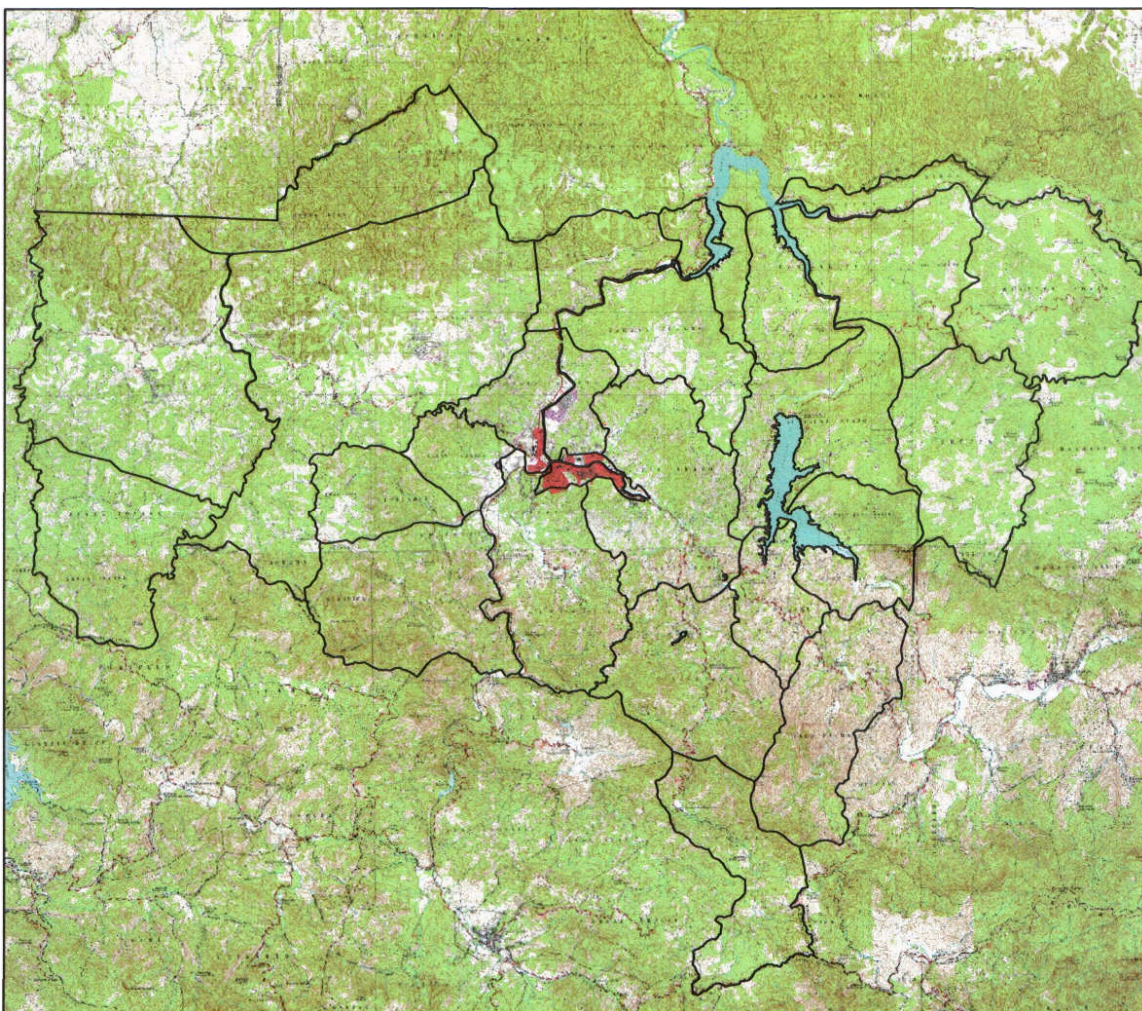
Model to be implemented in the Municipality of Utuado



AREA URBANA DE UTUADO



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Área Urbana Utuado



